LESSONS LEARNED REVIEW

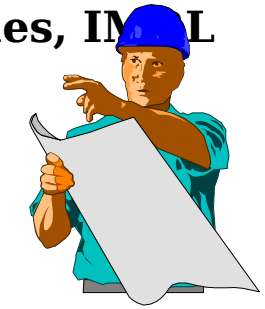
1. Control SERD Versus Application SERD

Control SERDs Is The SERD Designated By Chronology (First In) Or By Using the "*Change Of Control*" Screen. It Has The Only Allowable Entries For All SERD Blocks That Are In Control. These Entries Are Tied To The NIIN / NICN And Will Be The Entries On All SERDs On That NIIN.

Application SERDs Are Those Other SERDs Tied To That NIIN / NICN But Not In Control.

All Changes To "Control" Data Elements Should Be Coordinated With All Application Users.

Control Is Planned To Be Expanded To Allowancing List Series, IMRL Remarks, Etc.



2. END ARTICLE - CONTRACTOR - CONTRACT

Each End Article Has A Prime Contractor Which Submits SERDs Under Multi-year Contracts.

When Naval Aviation Depots (or other NAVAIR activities – NAWC AD & WD) Submit SERDs For EAs Under Cognizant Field Activity (CFA) Tasking, They Become The "Contractor" With The "Airtask" As Contract.

3. END ARTICLE - CONTRACTOR - PART NUMBER SERIES

End Article Contractors Normally Maintain A PN Series For Each Of Their EAs (Major Weapons Systems). [X = Alphabetic And Y = Numeric].

Aircraft	Contractor	CAGE	Part Number Series
A-4	DOUGLAS	18355	KYYYYYYY
A-6	GRUMMAN	26512	128XXXYYYYY
A-7	VOIGHT	80378	21Y-YYYY-YYY
AV-8	McAIR	76301	75DYYYYYY-YYYY
C-130	LOCKHEED	98897	34YYYYY-Y
C-2	GRUMMAN	26512	123XXXYYYYY-Y
E-2	GRUMMAN	26512	123XXXYYYYY-Y
E-6A	BOEING	81205	204-YYYYY-Y
F-4	McAIR	76301	68DYYYYYY-YYYY
F-14	GRUMMAN	26512	A5YXYYYYYY-Y
F-18	McAIR	76301	74DYYYYYY-YYYY
H-1	BELL	97499	TYYYYYY-YYY
H-2	KAMAN	84955	K6YYYYY-Y
H-3	SIKORSKY	78286	S6170-YYYYY-Y
H-46	BOEING VERTOL	77272	A02XYYYY-Y
H-53	SIKORSKY	78286	65720-YYYYY-YYY
H-60	SIKORSKY	78286	70700-YYYYY-YYY
OV-10	ROCKWELL	89372	EYYYY
EA-6	GRUMMAN	26512	1128XXXY
P-3	LOCKHEED	36659	9YYYYY-Y
S-3	LOCKHEED	36659	13YYYYY-YY
V-22	BELL/BOEING	62851	901-YYY-YYY-YYY

3. END ARTICLE - CONTRACTOR - PART NUMBER SERIES details

Grumman series also breakdown further into the type of SE being SERD'd [X = ALPHABETIC AND Y = NUMERIC].

123XXXYYYYY-Y, 1128XXXYYYYY-Y and 128XXXYYYYY-Y for E-2, C-2, EA-6B, and A-6 have specific Alpha-numeric combinations for certain types of SE:

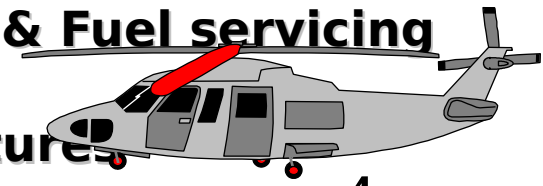
When XXX = GT it is for AIRFRAME SE

When XXX = SAV it is for Cable Sets, Adapter & Holding Fixtures, associated with ATE

When XXX = SCSEM it is for Mechanical adapters such as Air Cooling

When XXX = SEAV it is for Test Sets & Test Benches and their associated Cable Sets

When XXX = SFL it is for Pneumatics, Cryogenics & Fuel servicing

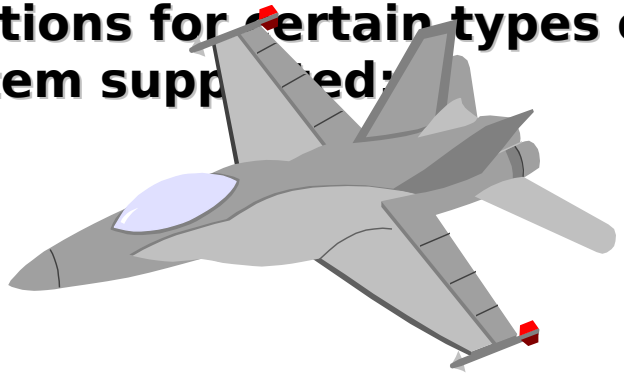


When XXX = SME it is for Mechanical Holding Fixtures

3. END ARTICLE - CONTRACTOR - PART NUMBER SERIES details

MCAIR (aka BOEING) also breakdown further into the type of SE being SERD'd for F-18 & AV-8B platform [X = ALPHABETIC AND Y = NUMERIC].

74DYYYYYY-YYYY and 75DYYYYYY-YYYY for F-18 & AV-8B have specific Numeric combinations for certain types of SE loosely based on WUC of the system supported:



When the first two characters of the YYYYYY-YYYY = 11 it is for AIRFRAME SE, 12 = Fuselage , 13 = Landing Gear , 14 = Flight controls, 29 = Propulsion SE, 42 = Electrical Power Distribution, 72 = Radar Navigation, 74 = Weapons Control, 75 = Weapons Delivery, etc

END ARTICLE - CONTRACTOR - PART NUMBER SERIES

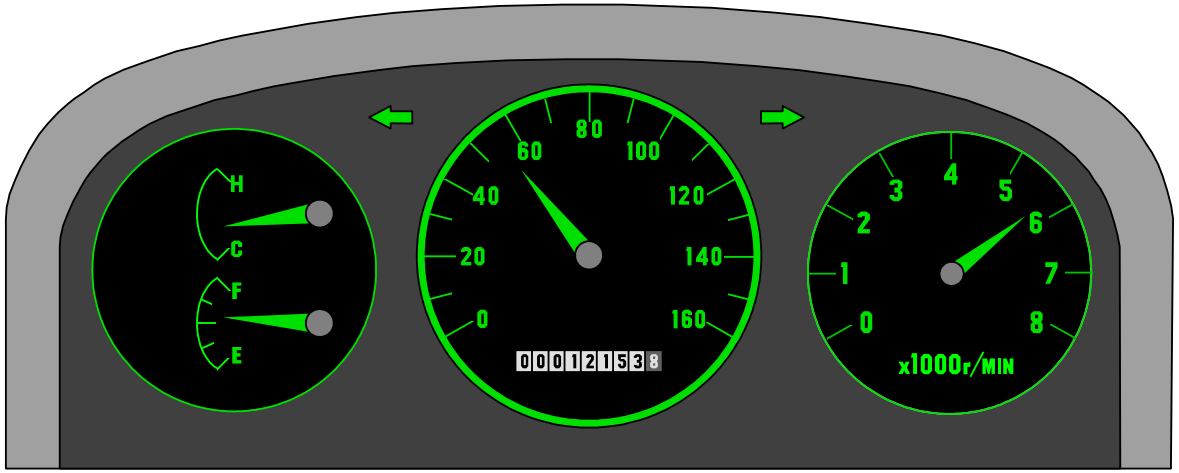
The same part number system applies to non-aircraft end artic

ENGINES

F110	GENERAL ELECTRIC	07482	21CYYYYXYY
F402	ROLLS-ROYCE PLC	06848	25YYY
F404	GENERAL ELECTRIC	07482/99207	21CYYYYXYY
J52	PRATT & WHITNEY	00198	PWAYYYYY
T400	PRATT & WHITNEY	00198	CPWAYYYYY-YY (C
T56	ALLISON GAS TURBINE	63005	67YYYY

AVIONICS SYSTEMS

ANARC-182	COLLINS RADIO	13499	YYY-YYYY-YYY



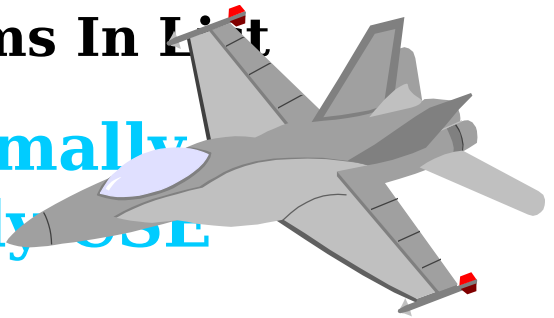
EA Breakdown Structure

4. BREAKDOWN ORDER

End Article - ACQ02 Header Tab Area
Systems - BOI Systems Tab = O Level & List Codes
WRAs / SRAs - BOI Systems Tab = I/D Level Are Piece Parts Of Higher Level Systems In List Codes

5. DEV / STD + COM /PEC

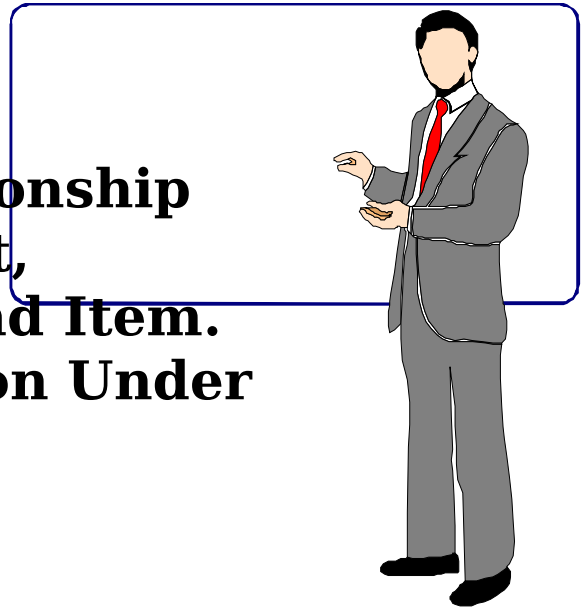
Development End Items Are Normally
Standard End Items Are Normally USE



6. CFE/GFE

End Article -- CFE/GFE Explains The Source For Acquiring The End Article.
(SLM DATA ONLY)
System -- CFE/GFE Explains The Source For Acquiring The System.
(SLM DATA ONLY)
End Item -- CFE/GFE Explains The Source Of Supply For The

7. LSA & 8.SM&R Code



7. LOGISTIC SUPPORT ANALYSIS

LSA Requirement May Reflect Relationship Amongst The Complexity Of Design, Cost, Maintenance Planning, Etc Of The SE End Item. (Relates To SM&R Code 4th / 5th Position Under The NIIN)

8. SM&R CODE

SM&R Code, Position 3, Must Match Lowest Maintenance Level (ML) Under The NIIN, Though It May Be More Restrictive, MLF/LVC - Must Also Match The Lowest Maintenance Level.

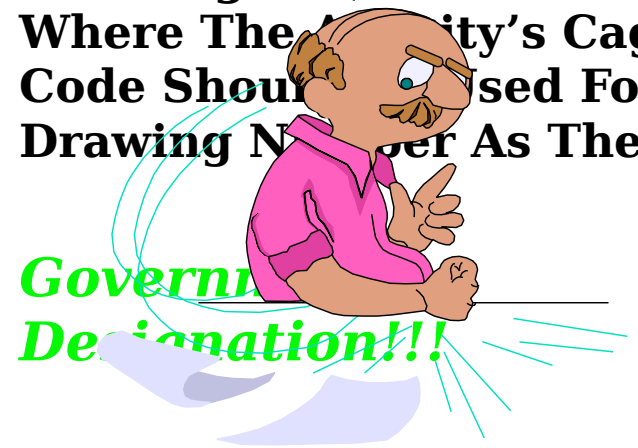
SM&R Code, Position 4, OF "O", "F", "H", "G" Means An LSA Entry Other Than No Is Required. The Land / Vessel Code (LVC) Must Be Supported By A Corresponding LVC Within The Designated System.

SM&R Code, Position 5, Relates To Recurring Price, For

9. Part Number / CAGE & 10. Deletion Codes

9. PART NUMBER/MODEL NUMBER & CAGE (TRUE NOMENCLATURE)

The Part Number And Cage Information Located On The Header Is The Actual SE Manufacturer's Part Number & Cage Assigned To The SE End Item To Be Delivered. "Limited" Exception To The Rule - During SERDing Of (PR Procurements / Government Drawings) Procurements Where The Activity's Cage Or The Government Drawing Number Cage Code Should Be Used For SERDing Along With The PR Number / The Drawing Number As The P/N.



Government Designation!!!

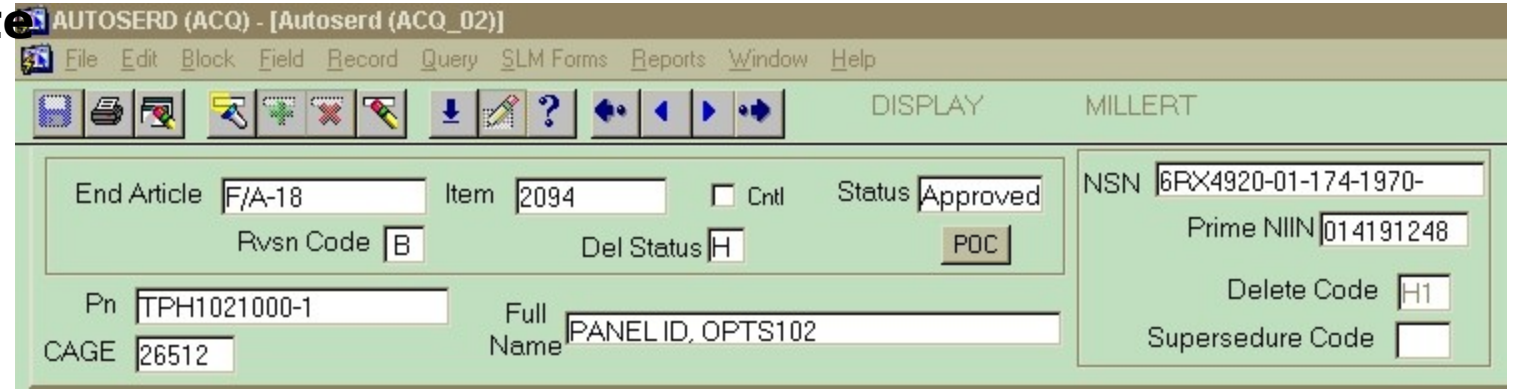
Note: ***It Should Never Be A Type***

10. DELETION CODES

The ACQ01&02 screens display the Deletion Codes (Del) IE A1, B1-B9, C1, D1, F1, G1, H1, I1, J1, S1 which determine the supply system status of a SERD. The Codes F1, I1 & S1 are NIIN Level Deletions, All Others Are End Article SERD Level Deletions Appropriate Only To That End Article.

H1 & F1 Deletion Code Examples

F/A-18 2094 - Example H1 Delete

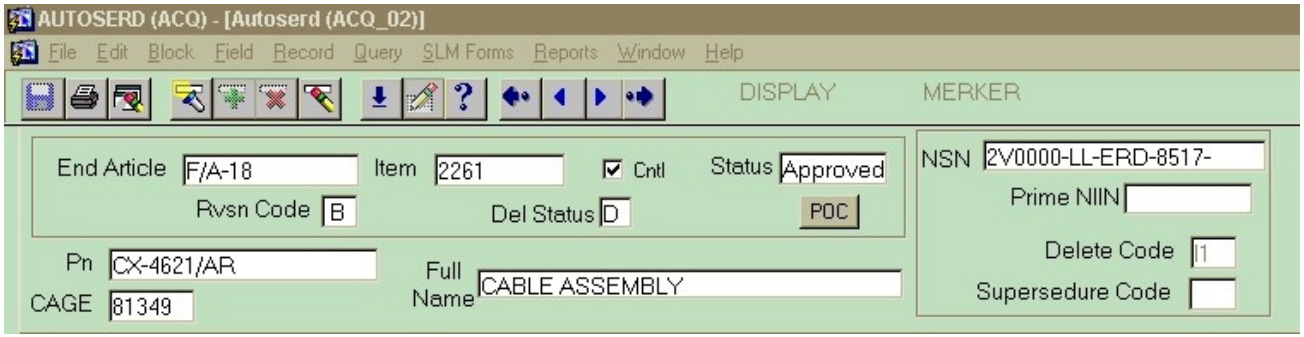


WSE 0015 - Example F1 Delete

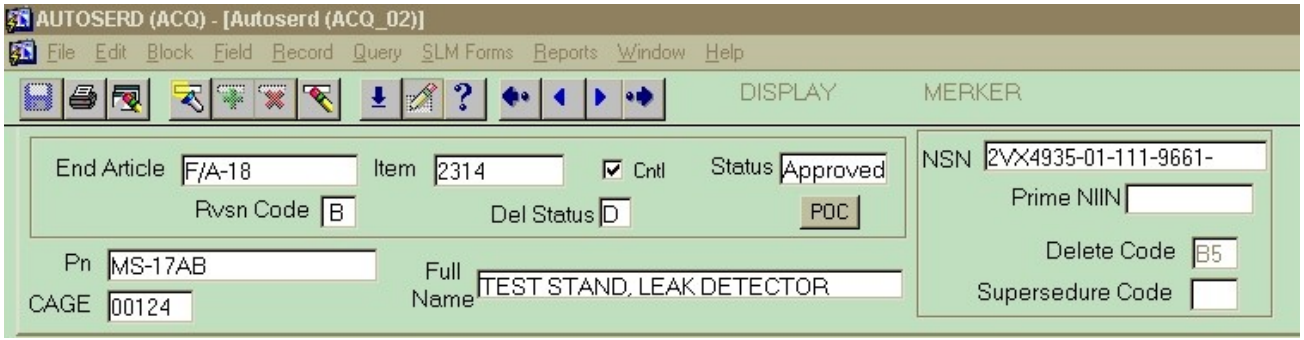
J1, I1 & B5 Deletion Code Examples

AV-8B 1300 - Example J1 Delete for Non-control SERDs only

F/A-18 2261 - Example I1 Delete



F/A-18 2314 - Example B5 Delete



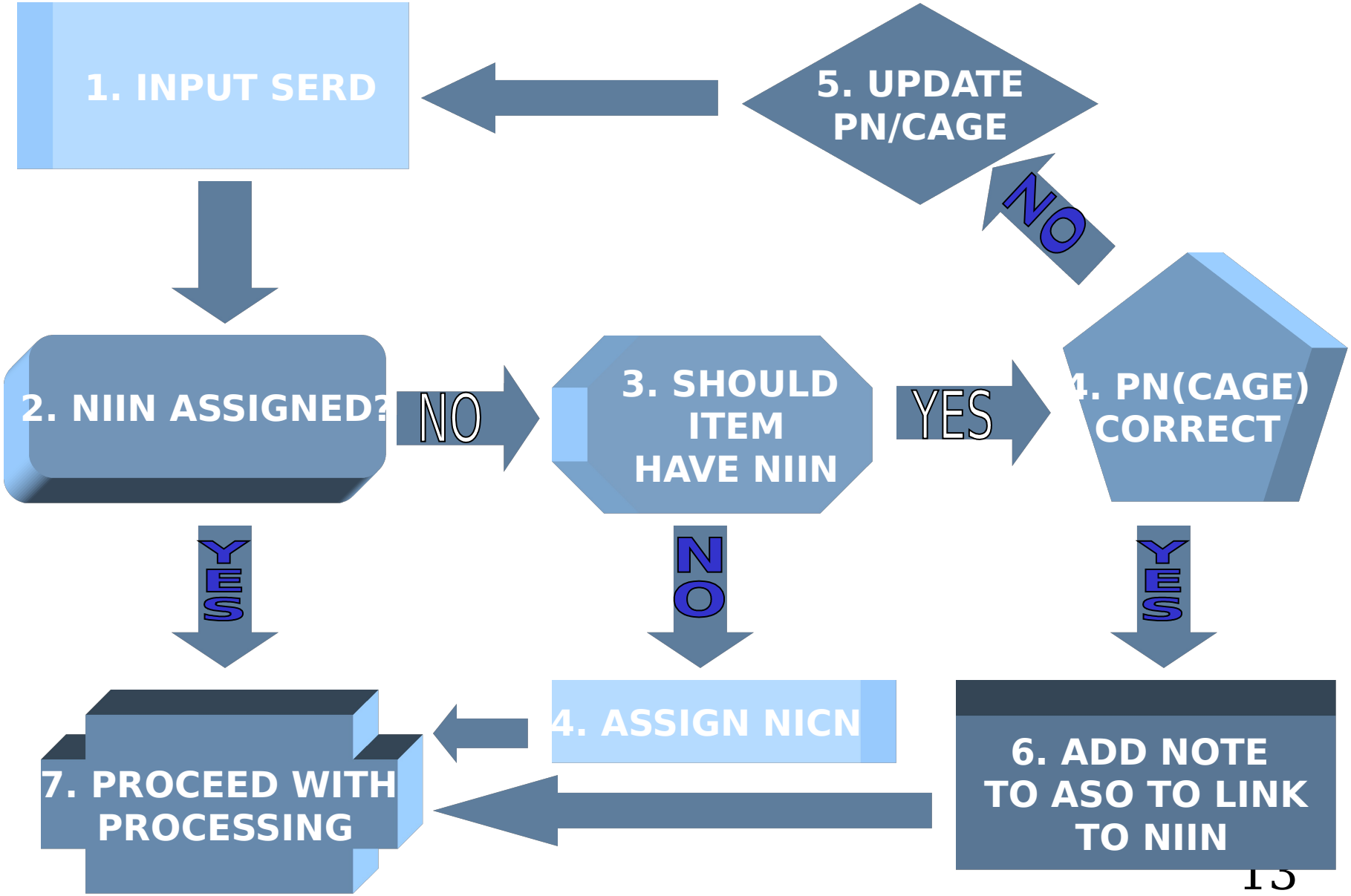
11. SE Physical Characteristics; Recurring Unit Price; Production Lead Time

All SERDs Must Have Size, Weight, Material & Finish, Production Lead Time, And Price Data To Be Processed by NAVICP.

Unrealistic Entries, Such As $1 For A Repairable Item Or .1 X .1 X .1 Size At 2,000 Pounds, Will Be Disagreed With By NAVICP And Require A SERD Revision To Clear It.

The NAVICPs Will Accept Engineering Estimates Of Wt/Cube And Unit Cost/Production Lead Time Provided You Identify It As An Estimate In The Remarks Section.

12. PN-CAGE … NIIN/NICN FLOWCHART



12. PN-CAGE ... NIIN/NICN FLOWCHART

(1) AUTOSERD Input

(2) Review Of SERD To See If NIIN (Numeric) Or NICN (Alpha Was Linked To PN-CAGE

(3) Determine If Item Should Have A NIIN. In General, New (I Items Should Have A NICN. Existing (Standard) Items Should

(4) Is Your PN-CAGE Correct On SERD? Often The CAGE May One Linked To That PN For The NIIN.

(5) When CAGE Or PN Is Incorrect On Your Pending SERD, Ha Changed To The Correct Combination And Re-enter SERD Data AUTOSERD And Follow Step (2) Of Flow.

(6) If Your PN-CAGE Is Correct And AUTOSERD Does Not Link Proper NIIN, Then Add Note (Below) To The SERD:

"NAVICP Note - This PN-CAGE Should Be Linked To NIIN Xx-xxx-xxxx" (X Is Numeric)

(7) Proceed With Quality Assurance (QA) Of All SERD Data Ent

13. Delete (Decision) Vs. Purge (Action)

Delete - A Decision To No Longer Have The SE As The Prime Item Of SE Based On Reason For Deletion Codes. To Accomplish The Delete Action, The SERD Must Be Approved.

Deleted SERDs Are Part Of The Approved Data Set In AUTOSERD!

Purge Definition - "To Cleanse Or Rid Of Impurities, Foreign Matter Or Undesirable Elements, To Kill Or Otherwise Get Rid Of."

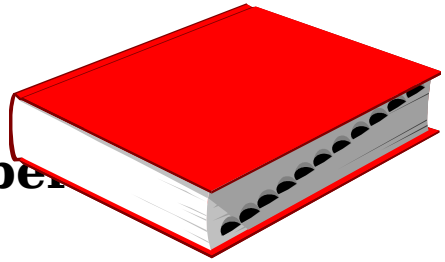
AUTOSERD - (1) To Remove All Elements From The AUTOSERD Data Base, Similar To Erasing A Blackboard.
(2) To Remove The Pending Status Of A SERD And To Revert To The Previously Approved Version Of The SERD. [If None Exists, Then You Have Done (1).]

Note - Last SERD Against The NIIN Must Be Deleted, Not *Purged* To Retain The SERD Information For Historical Purposes!

Remember

14. SERD HANDBOOK & 15. Replacement Buyout

14. SERD HANDBOOK



The Page # In Section 4 Is Always The Block Number Description.

(Ie: 4-7-1 = Block 7 Description, Page 1.)

Now Available Online

Https://webserd.Lakehurst.Navy.Mil/acq/serdhwebhelp/serd_handbook.Htm

15. Replacement / Buyout SERD Process

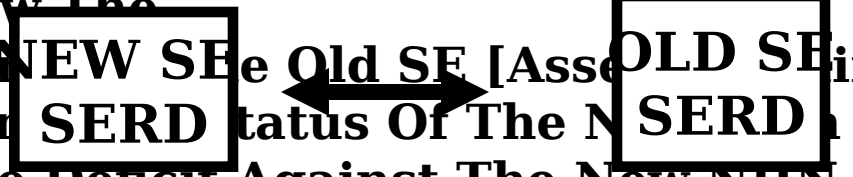
The Replacement - Buyout Process Involves The Procurement Of New SE To Replace Old/obsolete SE That Will Be Removed From Service. The Process Involves Two SERDs, One For The New Item And One For The Old Item. *Both* Are To Be Set Up As *Stand Alone Primes* And Not Linked As Prime - Alternates. (???)

Why - Because Linking Them Would Count All Assets Of The Old And The New SE Together In SERMIS. You Need Each NIIN To Sum Individually To Show The

Actual On-hand Ite

And The Current Or

Remember The Deficit Against The New NIIN Is The Only



e Old SE [Asse ing Replacement]

tatus Of The N [Fill Quantity].

16. F1 Obsolete & 17. SERD Disagree

16. <u>F1 - Obsolete / Obsolescence SERD Process</u>

AMMRL Program Process To Eliminate Old SE That Is Obsolete, Zero Assets In The Fleet And/or Limited Quantities Of Assets. The F1 Deletion Code Kills All Bit And Piece Support, Drops Depot Rework Capability If Applicable, And Will Also Generate Potential SERD Revisions For CAL STDs For The Obsolete SE.

17. SERD DISAGREE

Online Rejection Process For Missing Or Erroneous SERD Data Elements And/or Inconsistent Entries. The SERD Disagree Must Either Be Cleared Via Coordination With The Proper Personnel Or A SERD Revision Must Be Performed To Correct The Bad Data.

18. ARO REQUEST & 19. CONTROL SERD APPROVAL INDICATORS

18. ARO REQUEST / CHANGE PROCESS

To Change Acquisition Review Office Authority For An End Article From One Activity To Another Requires A Letter To NAVAIR PMA-260. PMA-260 Makes The Determination Of Approval/Disapproval And Then Issues A Decision Letter. Approvals Will Include Tasking the NAWCADLKE AUTOSERD Program Group With Updating The ARO End Article Table With That Activity Code For The Approved End Article(s).

19. CONTROL SERD APPROVAL INDICATORS

Only the Control SERD Needs to Be Approved for the NIIN Approval Indicator ='Y'. If Some SERDs Under a NIIN Are NAVICP Approved and There Is Another SERD Under That NIIN Still Pending -- the NIIN Approval Ind Is Still "Y". The SERD Approval Is Separate From This Process.

20. BEING IN AUTOSERD & SERMIS SIMULTANEOUSLY

(1) Log in to SEMS **Note: To maintain a current SEMS USERID, you must access SEMS a minimum 6 months since your last access or your USERID is invalidated!!!

(2) Click on one of the systems, IE AUTOSERD (or SERMIS)

(3) Open the screen or screens you want in that application

(4) Go to the tool bar and click on the Window option

(5) Click on the SEMS Main Menu

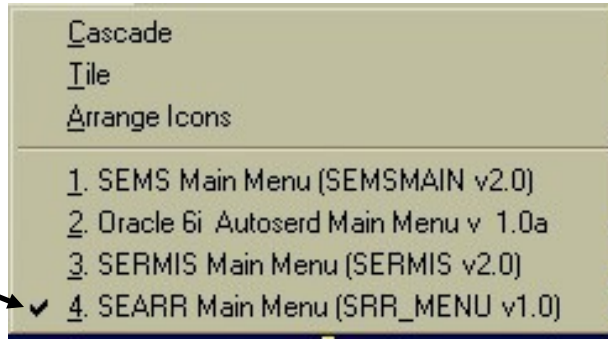
(6) Click on the other system SERMIS (or AUTOSERD)

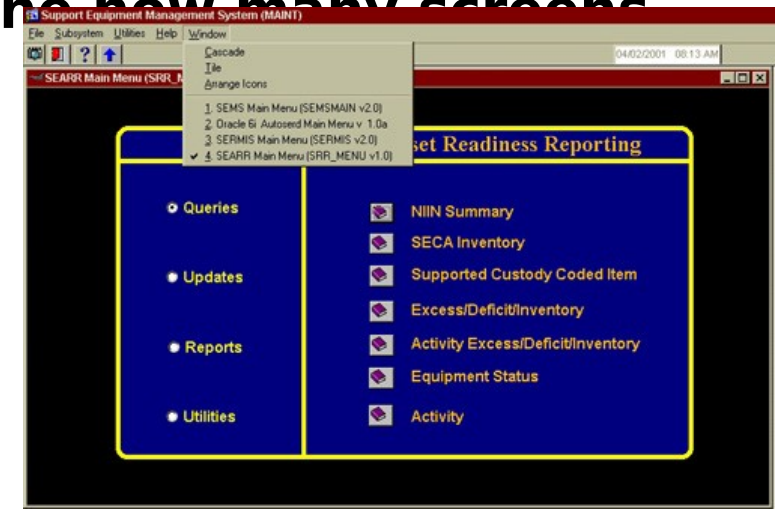
(7) Open the screen or screens you want in that application

(8) Go to the tool bar and click on the Window option to jump to any of the screens you have open in either application

NOTE: Your PCs memory will determine how many screens you can have open at one time!

Select the screen to view with the mouse (the check denotes currently viewed screen).


Cascade
Tile
Arrange Icons
1. SEMS Main Menu (SEMSMAIN v2.0)
2. Oracle 6i Autoserd Main Menu v 1.0a
3. SERMIS Main Menu (SERMIS v2.0)
4. SEARR Main Menu (SRR_MENU v1.0)



21. SERD Tab Price vs NIIN Tab Equipment Value

SERD Tab has the original price proposed at SERD submittal time. *This price is NOT passed to SERMIS.* This price does not get updated as it provides the estimated unit price at the time the SE was first brought into the inventory. Price inflation factors can be applied against this price to get a current estimated price!

NIIN Tab Equipment Value is the current price known to NAVICP's MIF and *is passed to SERMIS*. The field gets adjusted whenever either a new buy (by NAVICP) is done or NAVICP runs their annual price escalation. Additionally, a change can be requested by the WSM for the equipment value to be changed due to WSM procurement information. NOTE – NAVICP (by NAVSUP direction) requires the Contract Number, Contract Mod, and any specifics possible on the procurement justifying the price change. WSMs should fax / email copies of supporting documentation to NAVICP for faster TAT. (Otherwise NAVICP will need to obtain a copy of the mod to justify the MIF file update

22. LIST CODE ASSIGNMENT

SERD Preparers/evaluators Should Always Review AUTOSERD NIIN Level Summary For List Series Through The ACQ03 Screen To Ensure Allowancing In The Proper List Series.

Applications That Cross Multiple List Series For The Same Model Cause Multiple Authorized Allowances.

Allowances Within The Same List Series Are O.K.

Exception Is The R5 List Series Where The Basic List Code R5xxx Is Allowanced With Configuration List Code R5xxx-x. This Causes Dual Allowancing.

Note: Allowances Should Never Be For Just The CN (Training) List Series.

23. MULTIPLE ALLOWANCING CAUSED BY ERRONEOUS LIST CODE ASSIGNMENT EXAMPLES

F/A-18C10 Model @ “I” Level In R5230 And G0884 For Same NIIN. Allowance Computed For R5 List Series And Added To Allowance For GO List Series Which Equals Dual Allowance.

CH-53E Model @ “I” Level In R5571 And R5571D For Same NIIN. R5571 Covers All H-53 Models And R5571D Covers Items Peculiar To The Ch-53E Only.

F/A-18C10 Model @ “I” Level In R5230 And FE600-3 For Same NIIN. Allowance Computed For R5 List Series And Added To Allowance For FE List Series Equals Dual Allowance.

24. Dataset creation and Manipulation

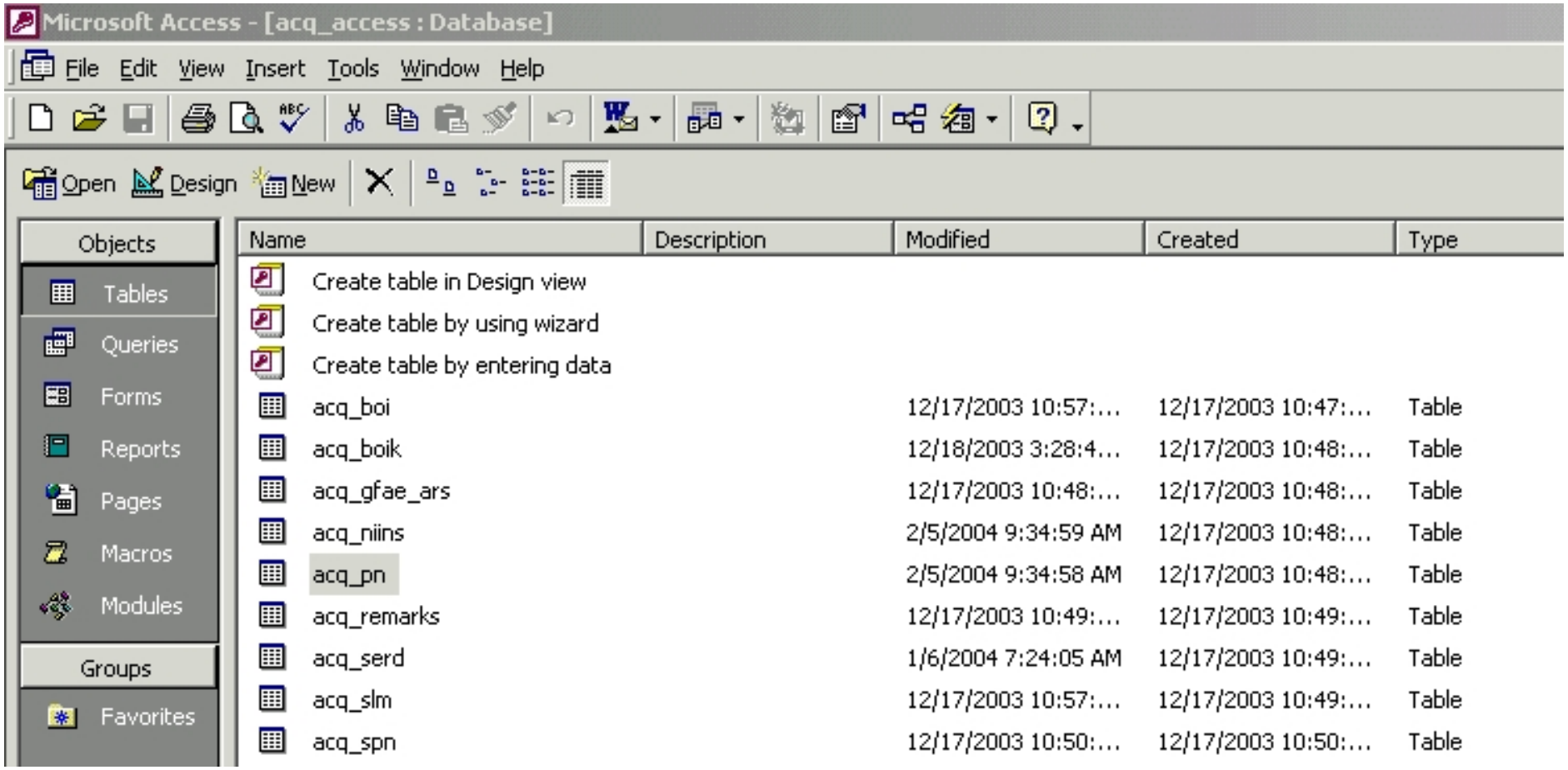
AUTOSERD has created standard extract programs which download into a Microsoft Access database called ACQ_Access. The files contain NIIN, PN, CAGE, BOI, IMRL Remarks, etc. SERMIS data for inventory data comparison against allowance is available in a file called SERMALL. SERMIS Tech data is also available in a MS Access file format. To access go to **https://138.60.67.250/acq/**

Click on the SEMS data repository button. Then select either AUTOSERD MS Access or SERMALL MS Access. Also included are the instructions for either Access file whether new or updating.

These are 2 Microsoft Access databases that provide our onsite/offsite users with the ability to create flexible ad hoc queries on Autoserd Data & Excess Deficit information by NIIN & AAL. The website also

24. ACQ_Access Database Example

ACQ_Access database



24. SERMALL Database

SERMALL database

SERMALL HAS BEEN UPDATED.

DOWNLOAD SERMALL.ZIP AT THE FOLLOWING WEBSITE :

https://webserd.lakehurst.navy.mil/acq/

CLICK ON SEMS DATA REPOSITORY BUTTON

CLICK ON SERMALL MS ACCESS BUTTON

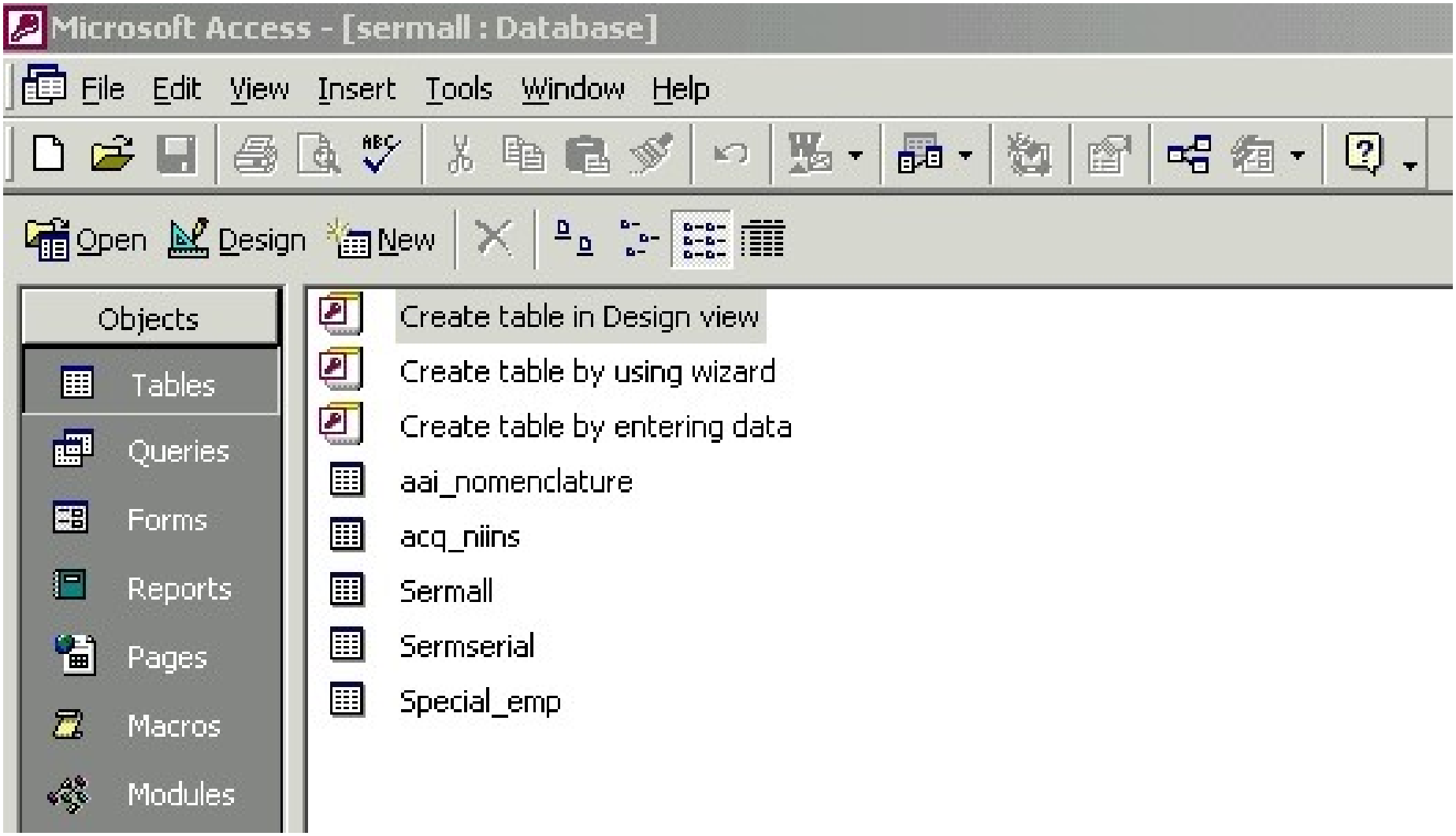
ANY ?????

POC JIM GORMAN EXT 4115 OR EMAIL AT JAMES.GORMAN@NAVY.MIL

OR DAVE MILLER EXT 4119 OR EMAIL AT DAVID.C.MILLER@NAVY.MIL

24. SERMALL Database Example

SERMALL database



25. SEB Process

Who assigns SEB numbers?

It is at NATEC North Island.

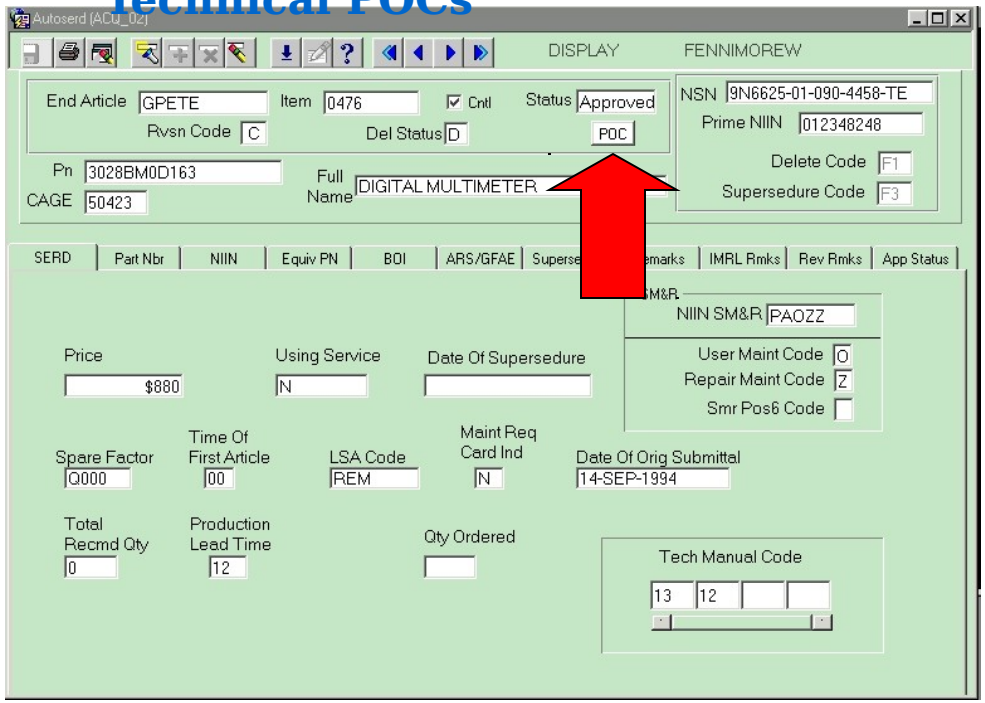
The Gentleman is Robert Zubiate and his phone number is (619) 542-2792.

Email is robert.zubiate@navy.mil

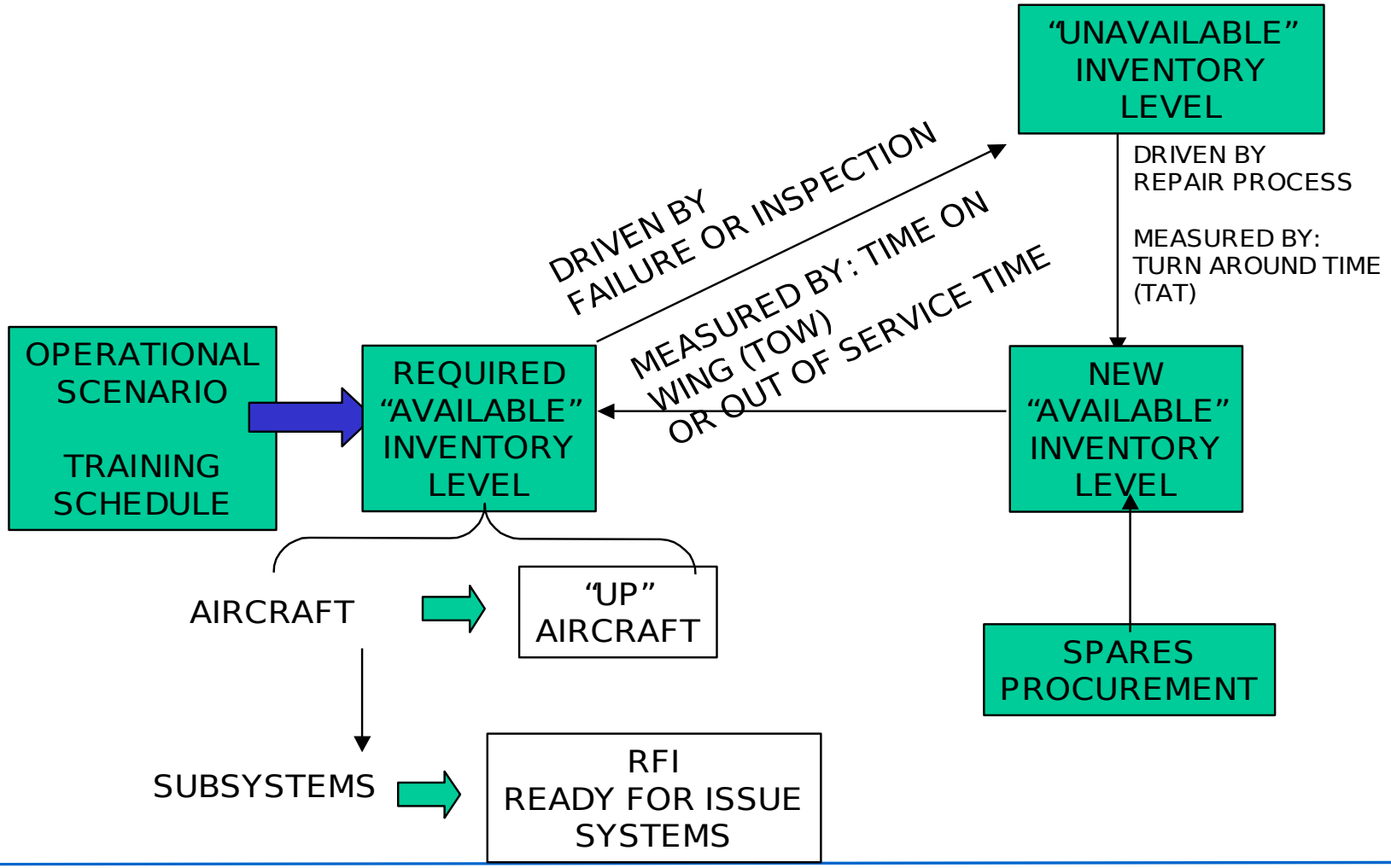
Takes about 5 minutes for him to get the info he needs and to give us a SEB number.

How do I find the POC for a SERD?

POC: Pushbutton launching the End Article Point of Contact Screen. The Screen is used to determine all users associated with an End Article. Lists the WSM or WSMs, Logistician and Technical POCs



Generic Process of Performance Model



Building Performance Models Using Top Level Maintenance Reporting Systems

Operational Availability (A_o) "primary measure of material readiness for weapon systems and equipment" – OPNAVINST 3000.12

Readiness Equation:

A_o: Consolidating combined effects of supportability, reliability, and maintainability

$$A_o = \frac{uptime}{uptime + downtime}$$

$$A_o = \frac{MTBF}{MTBF + MTTR + MLDT}$$

MLDT – waiting for logistics

MTBF – mean operating time between failures

MTTR – mean time to repair